In the Claims:

Please amend the claims as follows:

1-22 (cancelled)

23. (new) A device for synchronizing a robot that includes a control system, a first robot part and a second robot part movably attached to the first robot part, the device comprising:

a target arranged on the first robot part; and

a sensor arranged on the second robot part,

wherein the target includes several distinct detectable changes comprising height transitions, said height transitions being defined by sharp level differences in surfaces of said first robot part and comprising walls or sides, said height transitions comprising instantaneous level differences in the form of shoulder parts, said sensor sensing at least two of said distinct detectable changes at said respective height transitions to thereby enable the synchronizing of said robot by calculating a position of the target by calculating a center-point of adjacent height transitions.

24. (new) The device according to claim 23, wherein the sensor comprises a non-contact sensor.

25. (new) The device according to claim 23, wherein the sensor comprises a contact sensor.

26. (new) A device for synchronizing a robot that includes a control system, a first robot part and a second robot part movably attached to the first robot part, the device comprising:

a target arranged on the first robot part; and

a sensor arranged on the second robot part,

wherein the target includes several distinct detectable changes comprising height transitions, said height transitions being defined by sharp level differences in surfaces of said first robot part and comprising a groove with walls, said sensor sensing at least two of said distinct detectable changes at said respective height transitions to thereby enable the synchronizing of said robot by calculating a position of the target by calculating a center-point of adjacent height transitions.

27. (new) The device according to claim 26, wherein the sensor comprises a non-contact sensor.

28. (new) The device according to claim 26, wherein the sensor comprises a contact sensor.

29. (new) A device for synchronizing a robot that includes a control system, a first robot part and a second robot part movably attached to the first robot part, the device comprising:

a target arranged on the first robot part; and

a sensor arranged on the second robot part,

wherein the target includes several distinct detectable changes comprising height

transitions, said height transitions being defined by sharp level differences in surfaces of said first robot part and comprising an elevation with sides, said sensor sensing at least two of said distinct detectable changes at said respective height transitions to thereby enable the synchronizing of said robot by calculating a position of the target by calculating a center-point of adjacent height transitions.

30. (new) The device according to claim 29, wherein the sensor comprises a non-contact sensor.

31. (new) The device according to claim 29, wherein the sensor comprises a contact sensor.

32. (new) A device for synchronizing a robot that includes a control system, a first robot part and a second robot part movably attached to the first robot part, the device comprising:

a target arranged on the first robot part; and

a sensor arranged on the second robot part,

wherein the target includes height transitions comprising at least one of sides and walls, level differences in respective surfaces of said sides or walls defining distinct detectable structural changes in surfaces of said first robot part, the structural changes comprising instantaneous level differences in the form of shoulder parts, said sensor sensing at least two of said distinct detectable changes at said respective structural changes to thereby enable the synchronizing of said robot by calculating a position of the target by calculating a center-point of adjacent structural changes.

33. (new) The device according to claim 32, wherein the sensor comprises a non-contact sensor.

34. (new) The device according to claim 32, wherein the sensor comprises a contact sensor.

35. (new) A device for synchronizing a robot that includes a control system, a first robot part and a second robot part movably attached to the first robot part, the device comprising:

a target arranged on the first robot part; and

a sensor arranged on the second robot part,

wherein the target includes height transitions comprising an elevation with sides, level differences in respective surfaces of said sides or walls defining distinct detectable structural changes in surfaces of said first robot part, said sensor sensing at least two of said distinct detectable changes at said respective structural changes to thereby enable the synchronizing of said robot by calculating a position of the target by calculating a center-point of adjacent structural changes.

36. (new) The device according to claim 35, wherein the sensor comprises a non-contact sensor.

37. (new) The device according to claim 35, wherein the sensor comprises a contact sensor.